

## **What is claimed is:**

**[Claim 1]** 1. A method of managing the power distribution for a portable device, which comprises:

- (a) categorizing each task to be executed on the portable device;
- (b) prescribing a power management policy;
- (c) based on the power management policy, allocating a predetermined ratio of a unit power supply to each task according to a category of which each task is associated therewith; and
- (d) increasing the share of the unit power supply allocated to a task running in an active window according to the commands entered through a graphical user interface.

**[Claim 2]** 2. The method of managing the power distribution for a portable device of claim 1, wherein the unit power supply is obtained by dividing a total power supply amount provided by the portable device by a total number of a power supply cycles within a desired usage time of the portable device.

**[Claim 3]** 3. The method of managing the power distribution for a portable device of claim 2, wherein the step of prescribing the power management policy comprises:

designating a total number of power supply cycles within a desired usage time of the portable device and a periodic correction procedure interval;  
calculating the total power supply amount of the portable device; and  
calculating the unit power supply.

**[Claim 4]** 4. The method of managing the power distribution for a portable device of claim 3 further comprising:

- (e) observing the utilization of the unit power supply allocated to each task when a periodic correction procedure is reached; and

(f) redistributing the unit power supply allocated to each task based on an observation.

**[Claim 5]** 5. The method of managing the power distribution for a portable device of claim 1, wherein in the step of increasing the ratio of the unit power supply allocated to a task running in an active window, a maximum increase to the share of the unit power supply allocated to a task running in an active windows equals to the total share of unit power supply allocated to tasks having a batch attribute.

**[Claim 6]** 6. The method of managing the power distribution for a portable device of claim 1 further comprising detecting input/output devices being interacted with each task, and changes the category of which each task is associated therewith according to the type of the input/output devices.

**[Claim 7]** 7. The method of managing the power distribution for a portable device of claim 6 wherein:

if the input/output device interacting with a task is a sound card, categorizing the task into a soft real-time task.

**[Claim 8]** 8. The method of managing the power distribution for a portable device of claim 6 wherein:

if the input/output device interacting with a task is a mouse, categorizing the task into an interactive task.

**[Claim 9]** 9. The method of managing the power distribution for a portable device of claim 1, wherein the graphical user interface is implemented as a slide bar.

**[Claim 10] 10.** The method of managing the power distribution for a portable device of claim 1, wherein the graphical user interface is shown in the active window.

**[Claim 11] 11.** A method of managing the power distribution for a portable device, the method comprising:

- (a) categorizing each task to be executed on the portable device;
- (b) prescribing a power management policy;
- (c) based on the power management policy, distributing a predetermined ratio of a unit power supply among the tasks according to the category of which each task is associated therewith; and
- (d) in response to the commands inputted through a graphical user interface, transferring the share of a unit power supply allocated to tasks having a batch attribute to a task running in an active window.

**[Claim 12] 12.** The method of managing the power distribution for a portable device of claim 11, wherein the unit power supply is obtained by dividing a total power supply amount provided by the portable device by a total number of power supply cycles within a desired usage time of the portable device.

**[Claim 13] 13.** The method of managing the power distribution for a portable device of claim 12, wherein the power management policy comprises the steps:

designating a total number of power supply cycles within a desired usage time of the portable device and a periodic correction procedure interval;  
calculating the total power supply amount of the portable device; and  
calculating the unit power supply.

**[Claim 14] 14.** The method of managing the power distribution for a portable device of claim 12 further comprising:

- (e) observing the utilization of the unit power supply allocated to each task when a periodic correction procedure is reached; and
- (f) redistributing the unit power supply allocated to each task based on an observation.

**[Claim 15]** 15. The method of managing the power distribution for a portable device of claim 11 further comprising detecting input/output devices being interacted with each task, and changing the category of which each task is associated therewith according to the type of the input/output devices.

**[Claim 16]** 16. The method of managing the power distribution for a portable device of claim 11 wherein:

if the input/output device interacting with a task is a sound card, categorizing the task into a soft real-time task.

**[Claim 17]** 17. The method of managing the power distribution for a portable device of claim 11 wherein:

if the input/output device interacting with a task is a mouse, categorizing the task into an interactive task.

**[Claim 18]** 18. The method of managing the power distribution for a portable device of claim 11, wherein the graphical user interface is implemented as a slide bar.

**[Claim 19]** 19. A portable device comprising:

a processor for executing multiple tasks in an operating system;  
a power management device for categorizing each task to be executed on the portable device, prescribing a power management policy, distributing a predetermined ratio of a unit power supply among the tasks based on the power management policy according to the category of which each task is

associated therewith, increasing the share of the unit power supply allocated to a task running in an active window in response to the commands input by user.

**[Claim 20]** 20. The portable device of claim 19, wherein the power management device provides a graphical user interface for a user to increase the share of the unit power supply allocated to a task running in an active window through the commands input by the user.

**[Claim 21]** 21. The portable device of claim 20, wherein the graphical user interface is shown in the active window.

**[Claim 22]** 22. The portable device of claim 21, wherein the graphical user interface is implemented as a slide bar.